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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/612,204	07/02/2003	Timothy W. Womer	3522.19	4080

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EXAMINER


JIMENEZ, MARC QUEMUEL

ART UNIT PAPER NUMBER

3726

DATE MAILED: 03/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/612,204	Applicant(s) WOMER ET AL. 	
	Examiner Marc Jimenez	Art Unit 3726	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 21-24 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17-20 is/are allowed.
- 6) ☒ Claim(s) 1-5, 9, 10, 12 and 13 is/are rejected.
- 7) ☒ Claim(s) 6-8, 11 and 14-16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>07022003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I in the reply filed on 1/11/05 is acknowledged. The traversal is on the ground(s) that class 72, which the method claims were classified in, is drawn to deforming metals whereas the instant invention is used for cooling non-metallic sheets of material, such as paper, plastic and rubber and that a better classification for the process would probably be class 165 titled Heat Exchange, specifically class 165, subclass 89. This is not found persuasive because the claims are not limited to sheets of paper, plastic, and rubber. The identified class 165, subclass 89 is for apparatus inventions, not methods. As currently claimed, the method claims could be classified in a number of different classes because the claims are not limited to extruding a particular type of material. For example, if the claims are directed to extruding plastic or rubber, it would be classified in class 264 (PLASTIC AND NONMETALLIC ARTICLE SHAPING OR TREATING: PROCESSES). Paper processing can be found in class 226. Therefore, totally different art would have to be applied for the product claims and the process claims.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claims 1-5, 9, 10, 12, and 13** are rejected under 35 U.S.C. 102(b) as being anticipated by Frankland (US 5,567,448).

Frankland teaches a first cylindrical shell (44), a second cylindrical shell (70) surrounding the first shell (44), and defining a cylindrical annular space (60) therebetween, the space (60) having an axial length and a periphery, a first flow channel (80) located in the annular space, extending along a first portion of the axial length and around the periphery of the annular space, the first flow channel (80) having a first inlet (34) and a first outlet (38), and a second flow channel (82) located in the annular space, extending along a second portion of the axial length and around the periphery of the annular space, the second flow channel (82) having a second inlet [see to the left of lead line (52) in figure 5] and a second outlet [see to the right of lead line (54) in figure 5].

Note that in figure 5, to the left of lead line (52) could also be considered "a first outlet" of the first channel (80), therefore, the first seal (52) has a cylindrical spiral path along the first portion of the length and around the periphery of the space from the first inlet (34) to the first outlet. The second flow channel (82) has a second seal (56) having a circular path around the periphery of the annular space, and extending between the outer shell (70) and inner shell (44), a third seal (54) being spaced axially from the second seal (56), directed in a circular path around the periphery, and extending between the outer shell (70) and inner shell (44) for sealing against fluid flow past the third seal (54), and a transverse seal (50) passing between the second inlet and second outlet, the transverse seal (50) extending between the outer shell (70) and inner shell (44)

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for closing fluid flow between the second inlet and second outlet except by a circular path passing substantially around the periphery of the annular space of the second flow channel (82). Note the first source of fluid (90).

There are numerous inlets (34) and outlets (38). There are numerous seals (52),(50),(54),(56) along the periphery of the annular space defining respective channel spaces. Note the plates (74) and journals (24).

Allowable Subject Matter

4. Claims 17-20 are allowed.
5. Claims 6-8, 11, and 14-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc Jimenez whose telephone number (571) 272-4530. The examiner can normally be reached on Monday-Friday between 5:30 a.m.-2:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on (571) 273-4530. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Marc Jimenez
Primary Examiner
Art Unit 3726

MJ

March 21, 2005